

depressed at sides of ridge; carina lacking; vertex bristles as long as diameter of pseudostigmata, directed forward so as to lie parallel with face of aspis; pseudostigmatic organs long, slender, laterally extended then curving upward, distal fourth slightly roughened, apex pointed; notogaster with very high hood, lapet extending anteriorly of hood, that is the projecting hood extends ventrad posterior to lapet; bristles similar to vertex bristles; ventral plate denticles strongly developed; anal cover bristles similar to those of *S. diaphanus* (4 pl. 37, fig. 33); anal and genital covers sculptured like notogaster.

An unusually chunky, robust looking species, conspicuous by its huge hood and high, truncate rostrum, and rather elegant sculpturing.

Cotypes.—Two hundred fifty-five specimens from litter of oak woods on east slope of ridge above Poplar Cove, Bent Creek Experimental Forest, Buncombe Co., N. Car.; taken July 15th, 1935, slide 35F6.2-36.

LITERATURE CITED.

1. Banks, N., 1912, New American Mites, Proc. Ent. Soc. Wash., 14 : 96-99, pls. 1, 2.
2. Berlese, A., 1916, Centuria prima, Redia, 12 : 19-67.
3. Grandjean, F., 1936 (May 30), Les Oribates de Jean Frédéric Hermann et de son Père, Ann. Soc. Ent. France, 105 : 27-110, 14 figs.
4. Jacot, A. P., 1930, Oribatid Mites of the Subfamily Phthiracarinae of the Northeastern United States, Proc. Boston Soc. Nat. Hist., 39 : 209-261, pls. 33-42.
5. Same, 1936, Three Possible Mite Vectors of the Dutch Elm Disease, Ann. Ent. Soc. Am., 29 : 627-635, 13 figs.

A NEW ROOT APHID (HOMOPTERA: APHIIDAE).

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The species which is the subject of this paper was first discovered on cotton roots by C. F. Rainwater of the Division of Cotton Insect Investigations, Bureau of Entomology and Plant Quarantine, who has conducted biological studies on it at Florence, S. C. It is described at this time so that the name may be used in publications covering those investigations. Specimens taken on other hosts and in other localities have been in the National Collection since 1900.

Rhopalosiphum subterraneum, new species.

Apterous viviparous female.—Color brown. Body and appendages with long, conspicuous hairs. Antennae much shorter than body, 5-segmented; no secondary sensoria; hairs about twice as long as width of segments and very erect; length of segments: III, 0.17-0.30 mm.; IV, 0.08-0.11 mm.; V, base 0.06-0.08 mm., unguis 0.26-0.46 mm. Head 0.35-0.46 mm. across eyes. Beak reaching to posterior coxae. Cornicles 0.21-0.26 mm. in length, imbricated, slightly

bulging, the flange very prominent. Cauda 0.09–0.12 mm. long, constricted, and with two prominent hairs on each side.

Alate viviparous female.—Color brown, with lateral dark patches showing on abdomens of mounted specimens. Hairs much shorter than in the case of the apterae. Antennae shorter than body, 5-segmented; hairs conspicuous, being about as long as the width of the segments; III with 13 to 23 sensoria along nearly the entire length; IV with 0 to 3 secondary sensoria, usually 2; length of segments: III, 0.30–0.46 mm.; IV, 0.11–0.15 mm.; V, base, 0.07–0.09 mm., unguis, 0.45–0.56 mm. Head 0.41–0.44 mm. across the eyes. Beak reaching to posterior coxa. Cornicles 0.21–0.26 mm. in length, imbricated, less swollen than in the apterae. Cauda 0.08–0.11 mm. long, constricted, with two sets of lateral hairs.

Hosts.—Roots of cotton, okra, butter beans, wheat, oats, barley, *Oenothera laciniata*, *Eleusine indica*, *Gnaphalium* sp., life everlasting, celery, iris. This aphid is nearly always attended by ants.

Distribution.—Maryland, Virginia, North Carolina, South Carolina, Alabama, Ohio, Indiana, Illinois, Missouri, Texas, California.

Type.—Type slide, bearing cotype specimens reared on cotton roots at Florence, S. C., by C. F. Rainwater, deposited in the U. S. National Museum under Cat. No. 52094. Also several slides of paracotype specimens from roots of cotton from the same locality.

Taxonomy.—This species may be separated from the 5-segmented strain of *Rhopalosiphum prunifoliae* (Fitch) by its brown color and by the much longer and more erect hairs on the antennae and body, especially in the apterous form. From *Rhopalosiphum enigmae*, var. *parvae* Hottes and Frison, it differs by the longer unguis in proportion to antennal segment III, by the smaller lateral tubercles, and by the more cylindrical cornicles. Although differing from normal *Rhopalosiphum* in having 5-segmented antennae, the species is placed in that genus for the present, since an occasional specimen is found in which one antenna has faint indications of a sixth segment. Later it may prove advisable to propose a new generic name to include such forms as this species and *R. enigmae* var. *parvae*.

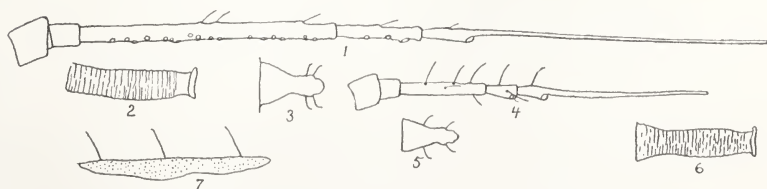


Figure 1.—Alate Viviparous Female.—1, antenna; 2, cornicle; 3, cauda. Apterous Viviparous Female.—4, antenna; 5, cauda; 6, cornicle, 7, abdominal hairs.